BRIDGES IN MATHEMATICS 2

GRADE 2 SUPPLEMENT

Set A3 Number & Operations: Division

Includes

Activity 1: The Pet Store A3.1

Skills & Concepts

★ model, describe, and create division situations in which a set of objects is separated into equivalent sets

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Bridges in Mathematics Grade 2 Supplement
Set A3 Numbers & Operations: Division

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Bridges in Mathematics is a standards-based K–5 curriculum that provides a unique blend of concept development and skills practice in the context of problem solving. It incorporates the Number Corner, a collection of daily skill-building activities for students.

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Set A3 ★ Activity 1

ACTIVITY

The Pet Store

Overview

Students use Unifix cubes to solve and pose simple division story problems.

Skills & Concepts

★ model, describe, and create division situations in which a set of objects is separated into equivalent sets

You'll need

★ 3" × 5" construction paper or index cards (6 pieces or cards per student)

★ Unifix cubes (about 30 per student)

Instructions for The Pet Store

1. Explain to your students that they're going to work together to solve some story problems about a pet store today. Take a few minutes to talk about pet stores before you begin. How many of them have gone to a pet store before? What do you find in pet stores? Why do people shop at pet stores?

2. Give each student 6 pieces of 3" × 5" construction paper or 6 index cards and about 30 Unifix cubes. Have them stack the pieces of paper to one side and move the cubes into a neat pile above their work area. Then tell them the following story:

One morning, the pet store owner got 18 new tropical fish. She had 3 empty aquariums to put them in. If she puts the same number of fish into each aquarium, how many fish will be in each one?

Tell the story a second time and work with input from the class to record the important information on the whiteboard.

18 fish ⟶ 3 aquariums

How many fish in each?

3. Then invite students to make conjectures. How many fish do they think will wind up in each aquarium? Why?

> ***Students*** *It's going to be more than 5 because 5 + 5 + 5 is 15.*
> *I think 10 in each!*
> *But that would take 30 fish, because 10, 20, 30.*
> *Maybe it'll be 6 or 7.*

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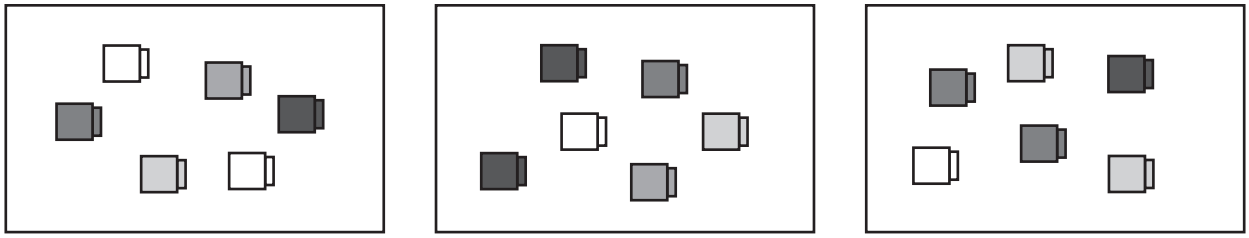
Activity 1 The Pet Store (cont.)

4. Now have students model the situation, using paper rectangles for the aquariums and Unifix cubes for the fish. Encourage them to share their strategies and solutions with one another as they work.

> ***Jalen*** *I'm just going to put a fish in each tank and keep going until I get up to 18.*
>
> ***Maya*** *I'm getting 18 cubes. Then I'm going to put one in each tank. One for you, one for you, one for you, like that, until I run out.*

5. After they've had a minute or two to work, ask volunteers to share their solutions and strategies with the class.



> ***Hannah*** *I got 6 in each tank. First I got 18 cubes, and then I just starting putting them in the tanks one at a time. It came out to 6 when I was all done.*
>
> ***David*** *It came out the same for me. Plus you can see that 6 + 6 is 12, and then 6 more is 18, so it works out right. Six fish in every tank.*

6. Have students clear their work area by moving the cubes to the side and re-stacking their paper rectangles. Then tell a second story:

The next day, the pet store owner got 12 baby flop-eared rabbits. She had 4 empty cages to put them in. If she puts the same number of rabbits into each cage, how many rabbits will be in each one?

Tell the story a second time and work with input from the class to record the important information on the whiteboard.

12 rabbits ⟶ 4 cages

How many rabbits in each?

7. Have students make conjectures, model, solve, and discuss the problem as in steps 3–5.

8. Pose 2 or 3 more pet store problems using the same procedures described above. You can make up your own or use the ones below.

- There are 5 puppies at the pet store. The owner brought in 15 dog biscuits for them. If she gives each puppy the same number of biscuits, how many will they each get?
- Roberto and his dad came into the pet store on Saturday to buy some new tropical fish. They have 2 empty aquariums at home. They bought 16 fish. If they put the same number of fish into each aquarium, how many fish will be in each one?

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Activity 1 The Pet Store (cont.)

- Last Monday, the pet store owner got 24 brightly colored parakeets. She had 6 empty cages to put them in. If she puts the same number of birds into each cage, how many birds will be in each one?

9. Invite the children to pose additional pet store story problems for the class to solve.

Extensions

- Have students each write and illustrate a pet store story problem. Display the collection on the wall or in the corridor for other students and adults to enjoy.
- Read a story about pets or a pet store before or after this session.

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